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Jason Lango

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EXAMINER

ISMAIL, SHAWKI SAIF

ART UNIT

PAPER NUMBER

2155

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,678

Applicant(s)

LANGO ET AL.

Examiner

Shawki S. Ismail

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11-1-2005.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

RESPONSE TO AMENDMENT

1. This communication is responsive to the amendment filed on November 1, 2005. Claims 1 and 21 were amended. Claims 1-27 are pending examination.

The Old rejection maintained

2. The rejection is respectfully maintained as set forth in the last Office Action mailed on June 28, 2005. Applicants' arguments with respect to claims 1-27 have been fully considered but they are not persuasive and the old rejection is maintained.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 21-27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15-20 of copending Application No. 09/981,673. Although the conflicting claims are not identical,

they are not patentably distinct from each other because both the instant application and the '673' application relate to an apparatus for caching streaming media and to methods of operation of streaming media caches.

Claim 21 of the instant application corresponds to claim 15 of the '673' application. The instant application includes the added limitation wherein the header data are selected from the group: encoding scheme and duration. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to add this limitation in order to be able to quickly identify streams of the cached media based on the type of encoding or the playing time thereby making the system more efficient.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 contain:

- "...properties of the media stream..." it is unclear as to where the media stream is coming from.

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- “a plurality of data object files ...” it is unclear as to the location of the data object files.
- “... a file system...” it is unclear as to the location of the file system. There appears to be a missing link between the cache memory and the file system

Claim 8 contains:

- “storing a plurality of data objects in the cache memory...” it is unclear where the data objects are coming from.
- “...encoding of the media data...” it is unclear as to who is encoding the media data and where it is being done.
- “...object handle...” it is unclear where the object handle is located.
- “storing a second plurality of data objects in the cache memory...” it is unclear where the second plurality of data objects are coming from.
- “...second encoding of the media data...” it is unclear as to who is encoding the media data and where it is being done.

Claim 15 contains:

- “...first source media...” it is unclear where the first media is coming from.
- “...second source media...” it is unclear where the second media is coming from.
- “...tangible media...” it is unclear as to the location of the tangible media.

Claim 21 contains:

- “...object handle...” it is unclear where the object handle is located.

These are representative examples. Applicant should review all pending claims for similar problems. Other dependent claims, which are not specifically cited above are also rejected because of the deficiencies of their respective parent claim.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by **Hooper et al.**, (Hooper) U.S Patent No. **5,414,455**.

6. As to claim 1, Hooper teaches a cache memory configured to store and stream media data, the cache memory comprising:

a session data file configured to store properties of a media stream, wherein the properties are selected from a class: encoding scheme and duration (col. 6, lines 7-26);

a plurality of data object files, each data object file individually and directly accessible by a file system, each data object file comprising a data object configured to store a portion of a media data from the media stream (col. 6, lines 43-60).

7. As to claim 2, Hooper teaches the cache memory of claim 1 wherein a data object comprises an object meta-data portion and a plurality of data chunks (see Fig. 3, col. 6, lines 43-60),

wherein the object meta-data portion is configured to store a number representing a total number of data chunks in the plurality of data chunks (col. 6, lines 13-26), and

wherein each data chunk of the plurality data chunk are configured to store a subset of the portion the media data (col. 6, lines 43-60).

8. As to claim 3, Hooper teaches the cache memory of claim 2

wherein each data chunk comprises a chunk meta-data portion, a packet meta-data portion, and a plurality of packet payloads (see Fig. 3, col. 6, lines 43-60),

wherein the chunk meta-data portion is configured to store a number representing a total number of packet payloads in the plurality of packet payloads (col. 6, lines 13-26),

wherein the packet meta-data portion is configured to store a presentation time for each packet payload (col. 6, lines 43-60), and

wherein each of the plurality of packet payloads are configured to store only a portion of the subset of the portion of the media data (col. 6, lines 43-60).

9. As to claim 4, Hooper teaches the cache memory of claim 2 wherein each data object has an associated presentation time (col. 6, lines 49-60).

10. As to claim 5, Hooper teaches the cache memory of claim 4 wherein each data object has an associated duration time selected from the group: approximately: 5 seconds, 10 seconds, 15 seconds, 20 seconds, 30 seconds, 1 minute (col. 10, lines 19-32).

11. As to claim 6, Hooper teaches the cache memory of claim 2 wherein the object meta-data portion is also configured to store data selected from the group: file format version, beginning presentation time, ending presentation time, file size (col. 6, lines 49-60).

12. As to claim 7, Hooper teaches the cache memory of claim 3 wherein the data chunk meta-data portion is also configured to store file offsets to adjacent data chunks in the plurality of data chunks (col. 6, lines 43-60).

13. As to claim 8, Hooper teaches a method for storing in a cache memory, media data to be output as streaming media, the method comprising:

storing a first plurality of data objects in the cache memory the first plurality of data objects configured to store a first plurality of data associated with a first encoding of the media data, wherein each data object of the first plurality of data objects is directly addressable in the cache memory via an associated object handle, and wherein each data object of the first plurality of data objects is configured to store a portion of data from the first plurality of data (see Fig. 2, col. 4, lines 14-22, col. 6, lines 33-60); and

storing a second plurality of data objects in the cache memory the second plurality of data objects configured to store a second plurality of data associated with a second encoding of the media data, wherein each data object of the second plurality of data objects is directly addressable in the cache memory via an associated object handle, and wherein each data object of the second plurality of data objects is configured to store a portion of data from the second plurality of data (see Fig. 2, col. 4, lines 14-22, col. 6, lines 33-60).

14. As to claim 9, Hooper teaches the method of claim 8 wherein the first encoding of the media data and the second encoding of the media data have a different encoding

property selected from the class: target stream bit rates, target stream bit depth, thinning parameters (col. 6, lines 13-26).

15. As to claim 10, Hooper teaches the method of claim 9

wherein a data object of the first plurality of data objects comprises an object meta-data portion and a plurality of data chunks (see Fig. 3, col. 6, lines 43-60),

wherein the data object is configured to store a first portion of data from the first plurality of data (col. 6, lines 43-60)

wherein the object meta-data portion is configured to store a number representing a total number of data chunks in the plurality of data chunks (col. 6, lines 13-26), and

wherein the plurality of data chunks are configured to store a subportion of data from the first portion of data(col. 6, lines 43-60).

16. As to claim 11, Hooper teaches the method of claim 10

wherein a data chunk of the plurality of data chunks comprises a chunk meta-data portion, packet meta-data portion and a plurality of packet payloads (see Fig. 3, col. 6, lines 43-60),

wherein the data chunk is configured to store a subportion of data from the portion of data (col. 6, lines 43-60),

wherein the chunk meta-data are configured to store a number representing the total number of packet payloads in the plurality of packet payloads (col. 6, lines 13-26),

wherein the packet meta-data portion is configured to store a presentation time for each packet payload (col. 6, lines 43-60), and

wherein the plurality of packet payloads are configured to store a smaller subportion of data from the portion of data (col. 6, lines 43-60).

17. As to claim 12, Hooper teaches the method of claim 10 wherein the data chunk has a presentation time different from a presentation time for other data chunks in the plurality of data chunks (col. 6, lines 43-60).

18. As to claim 13, Hooper teaches the method of claim 12 wherein the smaller subportion of data has an associated duration of less than or equal to approximately a time selected from the group: 10 seconds, 30 seconds, 1 minute (col. 10, lines 19-32).

19. As to claim 14, Hooper teaches the method of claim 10 wherein the first portion of data is associated with a first logical segment of the media data (col. 9, lines 60-66).

20. Claims 15-20 teach essentially the computer program product of the above mentioned claims thus they are rejected under the same rationale.

21. Claims 21-27 are allowable, provided that a timely filed terminal disclaimer is provided.

Response to Arguments

Applicant's arguments have been fully considered but they are not deemed to be persuasive.

In the remarks applicant argues in substance that:

(A) Argument: Hooper does not disclose or suggest that various portions of the video may appear in separate files such as "a session data file configured to store properties of a media stream" and "a plurality of data object files,...each data object file

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comprising a data object configured to store a portion of the media data from the media stream,"

Response: Examiner respectfully disagrees. Hooper teaches a system for distributing videos wherein a plurality of videos are stored on a mass storage device, such as video jukebox. Each video includes a plurality of frames. Each frame including digitally encoded video data, the video data representing a time sequenced image and audio signal for play-back on a viewing device. Hooper teaches wherein the system includes a memory buffer for storing a segment of a selected video. The segments include a predetermined time interval of the selected video (refer to fig. 2, col. 1 line 60 – col. 2, line 5) and, therefore; Hooper meets the scope of the claimed limitation.

(B) Argument: Hooper fails to disclose or suggest "storing a first plurality of data associated with a first encoding of the media data" and "storing . . . a second plurality of data associated with a second encoding" of the same media data, as recited in claim 8.

Response: In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., first encoding and the second encoding are of the same media data) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Examiner has broadly interpreted the claimed limitation and nowhere in the claim does it teach that first encoding and the second encoding are of the same media data.

(C) Argument: Hooper does not suggest that various portions of the video may appear in separate files.

Response: In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., various portions of the video may appear in separate files) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Hooper teaches that a stored video comprises of a plurality of segment and each video segment addressable by a client device (refer to Fig. 6).

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawki S Ismail whose telephone number is 571-272-3985. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached at 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shawki Ismail
Patent Examiner
February 1, 2006



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SUPERVISORY PATENT EXAMINER